

REMARKS/ARGUMENTS

Claims 1-20 remain in this application. Claims 1-20 have been rejected under § 112; claims 1, 4, and 5 have been rejected under § 102(b); and claims 1, 2, 4, 5, 6, 7, 8, 11, 12, 13, 14, and 18 have been rejected under § 103(a). Claims 1 and 18 have now been amended. Claims 6, 8-10, 12, 14-17, 19 and 20 are herein canceled.

§ 112, Second Paragraph Rejections

The Examiner pointed out that the preambles of Claims 1, 18, and 20, state that the invention is directed to a system, while the independent and dependent claims include method steps. Claims 1 and 18 have now been amended in their respective preambles so as to state clearly that the present invention is a method. This was accomplished by rearrangement of phrases within the current claims.

The Examiner also pointed out that Claim 11 refers to “a second group of said residue elements assumes a generally flat form extending substantially perpendicular to the sheets.” The Examiner further stated that it is unclear as to whether a first group of residue elements exists and, if so, what properties of the first group of residue elements distinguishes it from the second group as claimed. The Applicant respectfully brings the Examiner’s attention claim 4 which refers to a “first group of residue elements.” Since, however, there are no claims that depend from previous claims in such a manner as to include both groups, and as clarity is not hamper, claims 11-14 have now been amended to remove direct reference to the offending “second group”.

The Applicant believes that amended claims 1, 4, 11 and 18 now include clear recitation as to the status of the present invention as a method, and that the of all

essential relationship distinctions have been clearly established, thereby overcoming the Examiner's rejections under § 112, second paragraph.

§ 102(b) Rejections

The Examiner has rejected claims 1, 4, and 5 under § 102(b) as being anticipated by Cartmell et al. (US 4,699,679). The Examiner's rejections are respectfully traversed.

The Applicant respectfully points out that Cartmell et al. does not teach selective attachment of residue as does claim 1 of the present invention. Rather, the residue of Cartmell et al. comprises fully bonded together layers of material from which the residue is then separated from the object. Cartmell et al. teaches that each of the two residue elements on each side of the formed object is a single substantially continuous residue element that is a substantially layered flat configuration similar to that of the formed object. There is neither hint nor suggestion in Cartmell et al. to selectively attach adjacent residue layers so as to form residue elements interconnected with a specific Z-fold configuration so as to facilitate their removal.

By contrast, the present invention clearly teaches throughout, selective attachment to adjacent residue layers so as to form residue elements interconnected with a specific Z-fold configuration so as to facilitate their removal. That is to say, that the present invention purposefully creates from the residue at least one residue group, comprised of bonded together residue elements, which is configured for removal in a predetermined fashion.

Independent claims 1 and 18 have now been amended to include the limitation of a plurality of residue elements non-rigidly interconnected in a generally Z-fold

arrangement. Support for this amendment may be found throughout the specification and especially on Page 14, lines 15.

The Applicant believes that independent claim 1 features language that clearly differentiates the method of the present invention from those of Cartmell et al. The Applicant believes that the amendment to claim 1 completely overcomes the Examiner's rejections on § 102 grounds.

§ 103 Rejections

The Examiner has rejected claims 1, 2, 4-8, 11-14 and 18 under § 103(a) as being unpatentable over the admitted prior art in view of Berg, Jr. et al. (US 5,520,308), Craig et al. (US 6,286,712), Feygin et al. (US 5,876,550), and Bar-Erez either individually or in combination. The Examiner's rejections are respectfully traversed.

The sheets and the of interconnectedness of the sheets of both Berg, Jr. et al. and Craig et al. are part of systems which include a dispensing package with which the full sheets interact as each sheet is withdrawn from the package. Further, both Berg, Jr. et al. and Craig et al. teach removal of full entire sheets of material. There is no hint or suggestion in either Berg, Jr. et al. or Craig et al. to remove only a portion of each of the sheets and leave the reminder of the sheet behind in the package.

By contrast, the present invention teaches removal of cut away residue portions of sheets such that the removal of each of the residue elements from the sheet leaves the object portion of the sheet in place. This is especially evident in Figures 1 and 2.

In the systems of both Berg, Jr. et al. and Craig et al. the interconnection between each of the sheets and the interaction between sheets and package is intended

for sequential separation of the sheets, one from another, as sheets are withdrawn from the interactive package. This is clearly teaching against the continuous removal of residue portions of sheets of the present invention.

In contrast, the present invention clearly teaches throughout the specification the continuous removal of residue portions of sheets in a timely manner, leaving in place a completed three-dimensional object rather than the removal of full sheets over a period of time, leaving an empty package. In order to further differentiate the present invention from the cited prior art, claims 1 and 18 have been amended to include the limitation that manual removal of each of said residue elements from the sheet leaves the object portion of the sheet in place and initiates removal of a subsequent one of said residue elements from the subsequent sheet leaving the object portion of the subsequent sheet in place.

The Examiner has suggested that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Berg, Jr. et al. and Craig et al. with that of Feygin et al. In each of the embodiments of Berg, Jr. et al. or Craig et al. each of the interconnected sheets is folded in a specific manner as required by the particular embodiment. Feygin et al., in Figure 4, in columns 19, lines 1-4 and column 20, lines 37-58, teaches a method of constructing small, substantially discrete, residue elements configured to easily break away from each other and the constructed object. The apparatus of Feygin provides no means for folding any portion of the sheet material. In fact, such folding would disrupt the operation of the apparatus. Further, the Applicant would respectfully assert that the size of Feygin's residue elements is ill suited for folding as suggested for the attaching suggested by Berg, Jr. et al. and Craig et al., therefore, a combination of the teachings of Berg, Jr. et

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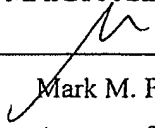
al. and Craig et al. with that of Feygin et al, would be impractical if not impossible to implement.

The Applicant believes that the above comments completely overcome the Examiner's rejections of claims 1 and 18 on § 103 grounds.

Double Patenting

The Examiner has reject claims 3, 9, 10, 15-17, 19 and 20 under 35 U.S.C. 101. Claims 3, 9, 10, 15-17, 19 and 20 are herein canceled.

In view of the above amendments and remarks it is respectfully submitted that independent claim 1, and hence dependent claims 4-5, 7, 11 and 13, and independent claim 18 are now in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,
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